

Name _____ Date _____ Hour _____

Chapter 10 Quiz Review

10.1 Add and Subtract Polynomials

Find the sum or difference. Make sure your answer is in standard form. Be careful of your signs! (2 - 4 points each)

1. $(5g^2 - 17g + 8) + (-8g^2 + 11g - 7)$ 2. $(x^2 - 16) + (8x^2 + 32)$ 3. $(-2a^3 + 5a^2 - a + 8) - (-2a^3 + 3a - 4)$

4. $(4x^2 - 1) - (3x - 2x^2)$

5. $(5x^3 - x^2 + 3x + 3) + (x^3 - 4x^2 + 17)$

6. $(5r^2 - 9r + 1) - (8r + 13)$

10.2 Multiply Polynomials

Find the product. (3 - 4 points each)

7. $(e - 6)(4e^2 + e - 7)$

8. $(5w + 4)(6w + 9)$

9. $(x + 13)(3x - 10)$

10. $(3z^3 - 5z^2 + 8)(z + 2)$

11. $(4v + 5)(-3v - 6)$

12. $(-2c^2)(-c^2 + 2c - 7)$

10.3 Special Products of Polynomials

Find The Product. (2 - 3 points each)

13. $(5y - 8)^2$

14. $(7h - 4)(7h + 4)$

15. $(a - 3c)^2$

16. $\left(4n + \frac{1}{3}\right)\left(4n - \frac{1}{3}\right)$

17. $(5m + 4)^2$

18. $(4 - 3x)(4 + 3x)$

10.4 Solving Polynomial Equations in Factored Form

Solve Each Equation. (2 - 3 points each)

19. $(6x - 5)(x + 2) = 0$

20. $3j(5j - 11)(j + 6) = 0$

21. $(2c - 12)^2 = 0$

22. $(4n - 10)\left(2n + \frac{1}{4}\right)(7n + 14) = 0$